

BIRD ID#: ?
ISSUE TITLE: IBIS-AMI Keyword Labels Clarification
REQUESTER: Walter Katz, Signal Integrity Software, Inc.
DATE SUBMITTED: August 31, 2010
DATE REVISED:
DATE ACCEPTED BY IBIS OPEN FORUM:

STATEMENT OF THE ISSUE:

In the Section 6c, "ALGORITHMIC MODELING INTERFACE (AMI)", the branch "Labels" is used to assign names to columns in a "Table".

The suggestion is to use "Labels" in a similar way to assign names to entries in a "List".

The existing IBIS AMI Check program does not flag as an error or warning when "Labels" are included in this way in a "List" branch.

An example of using Labels

```
(Process (Usage In) (Type Integer)
  (List -2 -1 0 1 2)
  (Labels "X Slow" "Slow" "Typ" "Fast" "X Fast")
  (Description "Process corner used in the algorithmic model")
)
```

Replace this text:

```
| Format: (default is range)
| Value <value> Single value data
| Range <typ value> <min value> <max value>
| List <typ value> <value> <value> <value> ... <value>
| Corner <typ value> <slow value> <fast value>
| Increment <typ> <min> <max> <delta>
| After expansion, the allowed values of the parameter are
| typ+N*delta where N is any positive or negative integer
| value such that: min <= typ + N*delta <= max
| Steps <typ> <min> <max> <# steps>
| Treat exactly like Increment with
| <delta> == (<max>-<min>)/<# steps>
| Table The parameter name "Table" names a branch of the parameter
| tree rather than a single leaf. One of the leaves of this
| branch can be named "Labels" and, if provided, is to be
| assigned a string value containing a list of column names.
```

With the following text with changes noted by "|"*" lines:

```
| Format: (default is range)
| Value <value> Single value data
| Range <typ value> <min value> <max value>
| List <typ value> <value> <value> <value> ... <value>
|*      One of the leaves of branch containing this List can be
|*      named "Labels" and, if provided, is to be assigned a string
|*      value containing a list of List entry names. The number of
|*      entries in Labels must be the same as the number of entries
|*      in the List.
| Corner <typ value> <slow value> <fast value>
| Increment <typ> <min> <max> <delta>
|      After expansion, the allowed values of the parameter are
|      typ+N*delta where N is any positive or negative integer
|      value such that: min <= typ + N*delta <= max
| Steps <typ> <min> <max> <# steps>
|      Treat exactly like Increment with
|      <delta> == (<max>-<min>)/<# steps>
| Table The parameter name "Table" names a branch of the parameter
|      tree rather than a single leaf. One of the leaves of this
|      branch can be named "Labels" and, if provided, is to be
|      assigned a string value containing a list of column names.
```

ANALYSIS PATH/DATA THAT LED TO SPECIFICATION

ANY OTHER BACKGROUND INFORMATION:
